

Series 225P Pressure Switch/Tamper Proof

A sealed piston sensor with a efficient Nega-Rate® Belleville disc spring makes this switch well suited for high impulse hydraulic applications with tamper-proof set point.

Operating Pressure Data

| Series | Fixed Set Point Range Non-Adjustable (psig) | | Deadband (psi) | | Maximum Recommended System Pressure (psig) | | Proof Pressure (psig) | |
|--------|---|--------------|--|---------------------------------|--|-----------|-----------------------|-----------|
| | Increasing | Decreasing | Minimum | Maximum | Hydraulic | Pneumatic | Hydraulic | Pneumatic |
| 225P | 45 to 450 | 15 to 405 | 10% of increasing set point but no less than 30 psi | 45% of the Increasing set point | 5,000 | 3,000 | 7,500 | 7,500 |
| | 450 to 3000 | 250 to 2700 | 10% of increasing set point but no less than 160 psi | | | | | |
| 225PP | 3001 to 7500 | 2701 to 6750 | 10% of increasing set point | | 10,000* | 5,000** | 15,000*** | |

*Diminished safety factor equal to approximately 2:1. CE mark prohibited due to diminished factor of safety.

**Pneumatic set points not recommended above 5000 psig

***Diminished safety factor equal to approximately 1.3:1. CE mark prohibited due to diminished factor of safety.

Standard Specifications

Electrical

Snap action electrical switch assemblies, Part Numbers 057-0770 & 057-0772 (Form C) and 057-0771 & 057-0773 (Form CC), are listed by Underwriters' Laboratories, Inc., CSA International and NCC (INMETRO). See the miscellaneous option N for additional listings.

Electrical Connection

1/2 NPT male conduit connection with PVC insulated 18 AWG, 18" long leads

Pressure Connection

1/4 NPT Female

Temperature Range*

Ambient: -40°F to +180°F
(-40°C to +82°C)

Media: -40°F to +300°F
(-40°C to +149°C)

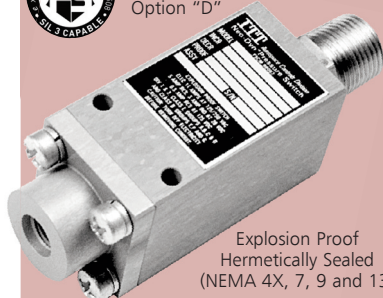
*Temperature limits change with O-Ring selection. See Electrical Assembly specification sheet for Temperature Class Ratings.

Shipping Weight

Approximately 1 pound



Order Miscellaneous Option "D"



Explosion Proof
Hermetically Sealed
(NEMA 4X, 7, 9 and 13)

Ordering Sequence — Select desired option for each category

OPTIONS

Set Points

225P between 15 psig dec. and 450 psig inc. (1.0 bar dec. and 31 bar inc.)
225P between 250 psig dec. and 3000 psig inc. (17 bar dec. and 207 bar inc.)
225PP between 2701 psig dec. and 7500 psig inc. (186 bar dec. and 517 bar inc.)

Wetted Material

1 Aluminum port and piston, Teflon seal and Buna-N O-Ring

Electrical Form

C 11 amp, 1/4 hp at 125 or 250 VAC; 5 amp resistive, 3 amp inductive at 28 VDC;
.5 amp resistive at 125 VDC
CC 11 amp, 1/4 hp at 125 or 250 VAC; 5 amp resistive, 3 amp inductive at 28 VDC;
.5 amp resistive at 125 VDC

Enclosure

6 Includes an explosion proof, hermetically-sealed electrical assembly. EX d IIC. Division 1 and 2, Class I, Groups A, B, C, and D; Class II, Groups E, F, and G. NEMA 4X, 7, and 9; IP66. Leads are factory sealed and Pressure Switches are Dual Seal Certified.

Miscellaneous

A Epoxy paint exterior — extra protection for severe environments
B Viton O-Ring
C EPR O-Ring
D SIL approval and marking, per IEC61508 (includes FMEA report)
I 3/4 NPT Conduit box with terminal strip (Groups C & D only, not available with N option)
M Gold electrical contacts for extremely low current applications
N ATEX and IECEx with CE Mark (Not available for 225P)
R 72" Electrical free leads
U M20 x 1.5 Electrical Conduit Adapter
W Stainless steel screws

Special (Consult representative or factory)

- Pressure port per MS33649E4
- Electrical connection per MS33678-10SL-3P
- Non-catalog set point, deadband and/or proof pressure
- Media temperature capability from -65°F to +350°F
- Stainless steel Aminco port with 9/16" - 18 UNF-3B THD

Ordering Procedure

- Specify set point, increasing or decreasing
- Specify deadband
- Specify media
- Insert available option number or letter designation as required

Example

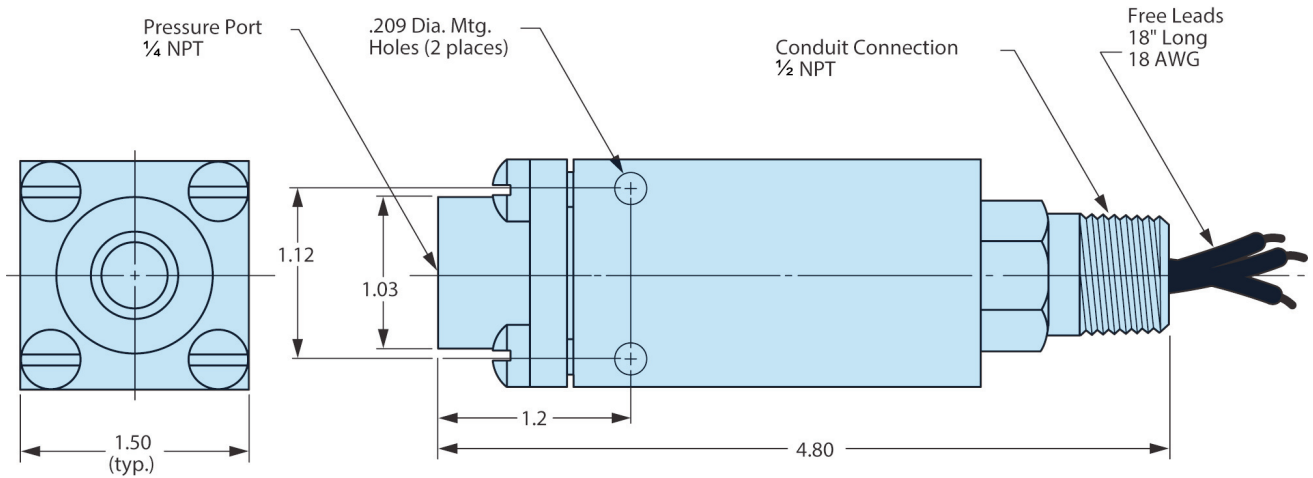
Series
Wetted Material
Electrical Form
Enclosure
Miscellaneous
Customer Identification
Number (numerically
assigned by factory)

225P 1 CC 6 _ _ _

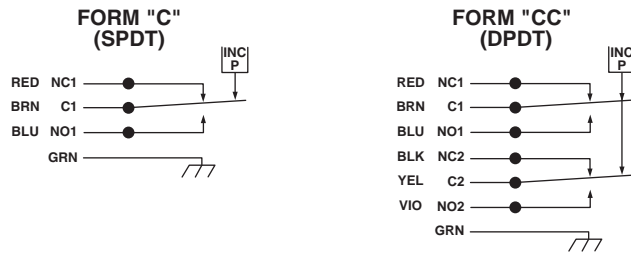
Series 225P Pressure Switch/Tamper Proof

Field Adjustable
15 to 7500 psig

Envelope Dimensions



Electrical Form



Basic Principles of Design

